

### **ABSTRACT OF THE DISCLOSURE**

A digital audio encoding method using an advanced psychoacoustic model is provided. The audio encoding method including determining the type of a window according to the characteristic of an input audio signal; generating a complex modified discrete cosine transform (CMDCT) spectrum from the input audio signal according to the determined window type; generating a fast Fourier transform (FFT) spectrum from the input audio signal, by using the determined window type; and performing a psychoacoustic model analysis by using the generated CMDCT spectrum and FFT spectrum.